



Appendix A

GLOSSARY AND ABBREVIATIONS

Appendix A

GLOSSARY

Included in the following pages are a number of terms with appropriate definitions to assist the reader in understanding the technical language included in this document.

Air carrier: an operator which: (1) performs at least five round trips per week between two or more points and publish flight schedules which specify the times, days of the week and places between which such flights are performed; or (2) transport mail by air pursuant to a current contract with the U.S. Postal Service. Certified in accordance with Federal Aviation Regulation (FAR) Parts 121 and 127.

Air taxi: An air carrier certificated in accordance with FAR Part 135 and authorized to provide, on demand, public transportation of persons and property by aircraft. Generally operates small aircraft "for hire" for specific trips.

Air traffic control tower (ATCT): a central operations facility in the terminal air traffic control system, consisting of a tower, including an associated IFR room if radar equipped, using air/ground communications and/or radar, visual signaling, and other devices to provide safe and expeditious movement of terminal air traffic.

Air route traffic control center (ARTCC): a facility established to provide air traffic control service to aircraft operating on an IFR flight plan within controlled airspace and principally during the enroute phase of flight.

Approach light system (ALS): an airport lighting facility which provides visual guidance to landing aircraft by radiating light beams in a directional pattern by which the pilot aligns the aircraft with the extended centerline of the runway on his final approach for landing.

Azimuth: horizontal direction or bearing; usually measured from the reference point of 0 degrees clockwise through 360 degrees.

Base leg: a flight path at right angles to the landing runway off its approach end. The base leg normally extends from the downwind leg to the intersection of the extended runway centerline.

Compass locator (LOM): a low power, low or medium frequency radio beacon installed in conjunction with the instrument landing system. When LOM is used, the locator is at the Outer Marker; when LMM is used, the locator is at the Middle Marker.

Crosswind leg: a flight path at right angles to the landing runway off its upwind leg.

Displaced threshold: a threshold that is located at a point on the runway other than the designated beginning of the runway.

Distance measuring equipment (DME): equipment (airborne and ground) used to measure, in nautical miles, the slant range distance of an aircraft from the DME navigational aid.

DNL: day-night noise level. The daily average noise metric in which that noise occurring between 10:00 p.m. and 7:00 a.m. is penalized by 10 times.

Downwind leg: a flight path parallel to the landing runway in the direction *opposite* to landing. The downwind leg normally extends between the crosswind leg and the base leg.

Duration: length of time, in seconds, a noise event such as an aircraft flyover is experienced. (May refer to the length of time a noise event exceeds a specified threshold level.)

Enplaned passengers: the total number of revenue and non-revenue passengers boarding aircraft, including originating, stop-over, and transfer passengers, in scheduled and non-scheduled services.

Fixed base operator (FBO): a provider of service to users of an airport. Such services include, but are not limited to, fueling, hangaring, flight training, repair and maintenance.

General aviation: that portion of civil aviation which encompasses all facets of aviation except air carriers holding a certificate of convenience and necessity, and large aircraft commercial operators.

Glide slope equipment: electrical equipment that emits signals which provide vertical guidance by reference to airborne instruments during instrument approaches (such as an ILS) or visual ground aids (such as VASI) which provide vertical guidance for a VFR approach, or for the visual portion of an instrument approach and landing.

Global positioning system (GPS): a navigational technology based on a constellation of satellites orbiting approximately 11,000 miles above the surface of the earth.

Ground effect: the excess attenuation attributed to absorption or reflection of noise by man-made or natural features on the ground surface.

Instrument approach procedure (IAP): a series of predetermined maneuvers for the orderly transfer of an aircraft under instrument flight conditions from the beginning of the initial approach to a landing, or to a point from which a landing may be made visually. It is prescribed and approved for a specific airport by competent authority.

Instrument flight rules (IFR): rules governing the procedures for conducting instrument flight. Also a term used by pilots and controllers to indicate type of flight plan.

Instrument landing system (ILS): a precision instrument approach system which normally consists of the following electronic components and visual aids: localizer, glide slope, outer marker, middle marker, and approach lights.

Localizer (LOC): the component of an ILS which provides horizontal guidance to the runway centerline for aircraft during approach and landing by radiating a directional pattern of radio waves modulated by two signals which, when received with equal intensity, are displayed by compatible airborne equipment as an "on-course" indication, and when received in unequal intensity are displayed as an "off-course" indication.

Localizer type directional aid (LDA): a facility of comparable utility and accuracy to a localizer, but is not part of a complete ILS and is not aligned with the runway.

Microwave landing system (MLS): a precision instrument approach system that provides precision guidance in azimuth, elevation, and distance measurement.

Missed approach: a maneuver conducted by a pilot when an instrument approach can not be completed to a landing. This may be due to visual contact not established at authorized minimums or instructions from air traffic control, or other reasons.

Non-directional beacon (NDB): a radio beacon transmitting non-directional signals that a pilot of an aircraft equipped with direction finding equipment can determine his/her bearing to or from the radio beacon and "home" on or track to or from the station. When the radio beacon is installed in conjunction with the instrument landing system marker, it is normally called a compass locator.

Nonprecision approach procedure: a standard instrument approach procedure in which no electronic glide slope is provided, such as VOR, GPS, RNAV, ASR, LDA, SDF, TACAN, NDB, or LOC.

Operation: a take-off or a landing.

Outer marker (OM): an ILS navigation facility in the terminal area navigation system located four to seven miles from the runway threshold on the extended centerline of the runway, indicating to the pilot, that he/she is passing over the facility and can begin final approach.

Precision approach path indicator (PAPI): an airport lighting facility in the terminal area navigation system used primarily under VFR conditions. The PAPI provides visual descent guidance to aircraft on approach to landing through a single row of two to four lights, radiating a high intensity red or white beam to indicate whether the pilot is above or below the required approach path to the runway. The PAPI has an effective visual range of 5 miles during the day and 20 miles at night.

Precision approach procedure: a standard instrument approach procedure in which an electronic glide slope is provided, such as ILS or MLS.

Precision instrument runway: a runway having a existing instrument landing system (ILS).

Reliever airport: an airport to serve general aviation aircraft which might otherwise use a congested air-carrier served airport.

Runway end identification lights (REIL): an airport lighting facility in the terminal area navigational system consisting of one flashing white high intensity light installed at each approach end corner of a runway and directed toward the approach zone, which enables the pilot to identify the threshold of a usable runway.

Upwind leg: a flight path parallel to the landing runway in the direction of landing.

Vector: a heading issued to an aircraft to provide navigational guidance by radar.

Victor airway: a control area or portion thereof established in the form of a corridor, the centerline of which is defined by radio navigational aids.

Visual approach: an approach wherein an aircraft on an IFR flight plan, operating in VFR conditions under the control of an air traffic facility and having an air traffic control authorization, may proceed to the airport of destination in VFR conditions.

Visual approach slope indicator (VASI): an airport lighting facility in the terminal area navigation system used primarily under VFR conditions. It provides vertical visual guidance to aircraft during approach and landing, by radiating a pattern of high intensity red and white focused light beams which indicate to the pilot that he/she is above, on, or below the glide path.

Visual flight rules (VFR): rules that govern the procedures for conducting flight under visual conditions. The term **VFR** is also used in the United States to indicate weather conditions that are equal to or greater than minimum VFR requirements. In addition, it is used by pilots and controllers to indicate type of flight plan.

VOR/Very high frequency omnidirectional range station: a ground-based electronic navigation aid transmitting very high frequency navigation signals, 360 degrees in azimuth, oriented from magnetic north. Used as the basis for navigation in the National Airspace System. The VOR periodically identifies itself by Morse Code and may have an additional voice identification feature.

VORTAC/VHF Omnidirectional range/tactical air navigation: a navigation aid providing VOR azimuth, TACAN azimuth, and TACAN distance-measuring equipment (DME) at one site.

ABBREVIATIONS

AGL:	above ground level
ALP:	airport layout plan
ALSF:	approach lighting system (with sequenced flashing lights)
ARC:	airport reference code
ARTCC:	air route traffic control center
ATCT:	air traffic control tower
DME:	distance measuring equipment
DNL:	day-night noise level
DW:	runway weight bearing capacity for aircraft with dual-wheel type landing gear
DTW:	runway weight bearing capacity for aircraft with dual-tandem type landing gear
FAA:	Federal Aviation Administration
FAR:	Federal Aviation Regulation
FBO:	fixed base operator
GPS:	global positioning system
GS:	glide slope
IFR:	instrument flight rules (FAR Part 91)
ILS:	instrument landing system
LAAS:	local area augmentation system
LMM:	compass locator at middle marker
LOC:	ILS localizer

LOM: compass locator at outer marker

MAG: Maricopa Association of Governments

MALSR: medium intensity approach lights with runway alignment indicator lights

MLS: microwave landing system

MM: middle marker

MSL: mean sea level

NAVAID: navigational aid

NDB: non-directional beacon

OM: outer marker

PAPI: precision approach path indicator

RASP: Regional Aviation System Plan

REIL: runway end identification lights

RNAV: area navigation

SANS: State Aviation Needs Study

SEL: sound exposure level

SW: runway weight bearing capacity for aircraft with single-wheel type landing gear

TACAN: tactical air navigation

TAF: terminal area forecast

TRACON: terminal radar approach control

VASI: visual approach slope indicator

VFR: visual flight rules (FAR Part 91)

VHF: very high frequency

VOR: very high frequency omnidirectional range

VORTAC: (see VOR and TACAN)

WAAS: wide area augmentation system